## Sachverzeichnis/Subject Index

Absolute chirality 783

Absorbance 285

Absorption spectra 209

Acceptor number 515, 655, 827

Acetonitrile 15, 655

Acetylation 1121

Acetyl derivatives 945

Acetyl-dimethylbicyclo[2.2.1]hept-5ene 335

2-Acetyl-3,3-dimethylbicyclo[2.2.1] hept-5-ene 921

Acid chlorides 1247

Acid ionization constants 869

Acidity constants 1049

Acridone alkaloids 731

Acronycine 731

Activity coefficients 247, 1067

Adamantanes 587

Adenosine 849

Adenosine, 2',3'-dideoxy-3'-mercapto 1017

ADP 1049, 1059

Adsorption capacities 153

Adsorption of organic electrolytes 1

(±)-Alamaridine 1397

(±)-epi-Alamaridine 1397

Aldopentose diethyl dithioacetals 763

Alkylation 713, 1287

2-Alkyl-1,2-dihydroquinolines 963

8-Allyltheophylline 565

AM1 calculations 301, 553, 1389, 1413

AM1 interpretation of infrared spectra 293

Amino alcohols 909

Aminoanthraquinones 313

1-Amino-2,6-di-*tert*-butylpyridinium perchlorate 35

8-Amino-3,6-dichloroquinoline 723

Aminolysis 1437

Aminosilane 615

AMP 1049, 1059

Angustifoline 1267

Anthraquinone imines 313

Antifungal activity 51

Antifungo 823

Antimalarial drugs 1259

Antimicrobial activity 1011

Antitumor 823

Antiviral activity 593

Arenetricarbonylchromium complexes 901

Arsenic 497

2-(5-Aryl-2-furyl)-benzothiazoles

1-(5-Aryl-2-furyl)-2-(2-benzothia-zolyl)-ethenes 209

2-Arylidene-cycloalkanones 441

Aspergillus oryzae 469

ATP 1059

Azathiaspiranes 1145

Azepinocodeines 345

Aziridine 743

[1-(2H-Azirin-2-yl)-alkyl]-phosphonates 1101

Azoxy compound 1383

Basic precipitation, partial of yttrium earths 795

Baylis-Hillman reaction 1279

3-Benzamidorhodanine 841

2,6-bis-(Benzimidazol-2'-yl)-pyridine 1301

Benzo[6,7]cyclohepta[1,2-d][1,3]thiazines 433

Benzo[4,5]cyclopenta[1,2-d][1,3]thiazines 433

Benzo[d]imidazolo[2,1-b]thiazolidines 1011

Benzofuran-3-ones 971

Benzophenone photosensitized cycloaddition 1153

2H-Benzopyranes 61

4H-1,4-Benzothiazines 1011

Bicine 497

bis-(2,2'-Bipyridyl)-bis-cyanoiron(II) 655

Bitter almond odour 1091

Bond properties 47

Boron 607

Bromocarnallite 1371

Buprenorphine 1229

tert-Butyl group 451

Cadmium 1041

Cadmium sulfide 599, 1215

Calorimetry 877

Camphene 921

Carbacephame 71

Carbamic acid ester 977

Carbon fibres 1365

Carnallite 1371

[C-C-C] + [N-O] addition 571

Cerium earth magnesium nitrates, separation from yttrium earth nitrates 479

Charge-transfer spectra 515

Chatancin 991

Chemoenzymatic synthesis 469

Chiral Cu(II) complexes 1293

Chiral discrimination 119, 141, 153

Chirality 189

Chiral recognition 119, 141, 153

Chloroacetate 1041

2-,3-,4-,5-,6-,7-Chloro- and -bromo-8quinolines 51

Chloro complex 833

α-Chloroepoxide 1427

3-Chloro-2-ethoxycarbonyl crotonic aldehyde 61

α-Chloroketone 1427

Chloroquine 1259

Chronovoltammetry 15, 107

Cinnamic odour 1091

Circular dichroism 671, 783

Clay catalysis 1033

Clay minerals 141, 153

CISbF5 47

Cluster 525

Cobalt(II) 1059

Colchiceine 267

COLOC spectrum 1407

Complexation 247, 841

Complexation equilibria 1197

Complexes 1041, 1321

Computer aided fragrance design 747

Condensed isoxazolines 1241

Configuration 325, 1101

Conformation 325, 1101, 1267, 1389

Conformational transmission 1145

Connolly surface 747

Convolution-deconvolution technique 1041

Coordination tendency 849

Copper 849

Copper(II) 823

Copper(II), aminoacidato complexes 1083

Copper chelates 325

Copper clusters 1339, 1353

Copper(II) complex 275, 833, 1189

Copper(II) mixed ligand complexes 1197

Coulometry 107, 497

Cr(III), Fe(III) and Co(II) complexes 385

Cross-linked 895

Crystal chemistry 535, 1223, 1311

Crystal packing 141

Crystal structure 119, 141, 275, 525, 535, 1207, 1223, 1311, 1339, 1427

Crystal structure analysis 833

Cu(NO<sub>3</sub>)<sub>2</sub>-SiO<sub>2</sub> reagent 335

Curve fitting 259

bis-Cyano-bis-(9,10-phenanthroline)iron(II) 827

Cyclic rearrangement 79

Cyclic transition state 217

Cyclic voltammetry 373, 1365

Cycloaddition 1247

Cycloaddition, intramolecular 983

Cycloalkanes 933

β-Cyclodextrin 681

Cyclohexane 877

Cyclopentane-1,3-dicarboxylic acid 335

cis-1,2-Cyclopentanediol 1293

Cyclopropanation catalyst 325

Darzens reaction 1427

DCPT 1171

Debenzylation 587

Decadienoic acids 707

Decomposition 1215

Density 877

2'-Deoxyuridines 593

Deprotonation 1301

Desulfurization 791

Determination of copper 1197

3'-O-Dialkylaminoalkyl thymidine 713

3'-O-Dialkylammoniumalkyl thymidine 713

Diastereotopy 1101

3,4-Diazabicyclo[4.3.0]non-2-ene 1113

Diazene 1113

9-Diazo-10-(dicyanomethylene)-9,10dihydroanthracene 1121

3,6-Dibromo-8-nitroquinoline 723

3,6-Dibromo-8-quinolinol 723

2,6-Di-tert-butylpyridine 35

3,6-Dichloro-8-nitroquinoline 723

3,6-Dichloro-8-quinolinol 723

10-Dicyanomethylene-9-anthrone 1121

10-Dicyanomethylene-anthrone hydrazone 549

10-Dicyanomethylene-9-anthrone hydrazone 1121

(10-Dicyanomethylene-9,10-dihydroanthracene-9-ylidene)-isopropylidene hydrazine 1121

Diels-Alder cycloaddition 425

Diffraction patterns 153

Diffuse reflectance spectra 385

2a,4-Dihydro-2*H*-azeto[1,2-*a*]quino-line-1,3-dione 71

3,4-Dihydro-1,4-benzoxazin-6(8a*H*)-ones 735

Dihydronorthevinone 1229

4,5-Dihydro-3-oxo-3*H*-1,2,4-triazole

4,5-Dihydro-3-oxo-3*H*-1,2,4-triazole-1-oxide 1383

3,4-Dihydro-1*H*-pyrrolo[1,2-*c*]thiazoles 189

Dihydroxythiophenes 1287

β-Diketone 43, 1321

(5*H*)-3,6-Dimethoxy-N-methyl-14,13iminoethano-phenanthro[4,5-*bcd*]-(8*H*)-chloroacetate 355

Dimethylcyclopentane derivatives 335

Dimethylmaleimide 1153

5,5-Dimethyl-6-methylenebicyclo [2.2.1]hept-2-ene 921

2-(1,2-Dimethyl-4(1*H*)quinolylidene)-1,3-dicarbonyl compounds 95

Dioxaspiranes 1145

Diphenylphosphinato 607

1,3-Dipolar cycloaddition 553, 735

1,3-Dipolar cycloaddition of nitrile oxides 301

1,3-Dipolar cycloaddition of nitrones 1413

Diprenorphine 1229

2,2'-Dipyridyl complexes 1075

4,4'-Dipyridyl complexes 1075

Disiloxane unit 579

Dissociation and stability constants 373, 811

Dissociation constant 233

Dithiaspiranes 1145

2D NMR 1407

Donor number 515, 655, 1189

Donor-acceptor system 549

Double salt 1215, 1371

DPP 509, 1183

Effective stability constant 285

Electrochemistry 491

Electrode kinetics 363

Electronic structure 1321

Enaminones 1443

Enantiomerically pure highly substituted decalinones, acidic fragmentation 991

Enantioselective catalysis 1293 Enantioselective chromatography 457 Enantioselective chromatography on cellulose triacetate 783 Enantioselective hydrolysis 469 Enantioselectivity 485 Energy transfer 25 Enumeration 1327 **Epoxidation 485 EPR 823** Equilibrium 599 Ethers, diastereomeric 983 **Evolution 1033** Excess molar heat capacity 877 Excess molar volume 877

Ferrocenophane 579 Five- and four-coordination 1189 Floral odour 1091 Fluorinated building blocks 1279 Force field calculations 955 Formal potential 15, 107 Formation constant 247, 859 Formation equilibria 1059 Fractional crystallization 415, 691, 1027 Fractional crystallization of cerium earth magnesium nitrates 479 Fractional crystallization of yttrium earth nitrates 795 Fragmentation 773 Fragmentation pattern 571 Free energy of mixed crystal formation 1067 Friedel-Crafts acylation 933

Gallic acid 1197 Gibbs energy of mixing 1371 Glycinate 1041 Grignard reaction 1229 Grob-Fragmentation 61

Fringelit D 955

Heavy yttrium earths, concentration of 795 Helical structure 451 Heptagonal/hexagonal rings 403

Herpes simplex virus 713, 1017 2-[2-(Hetarylidene)ethylidene]-1,3dicarbonyl compounds 95 Heteroassociation 753 Heterocycles 933 Highly concentrated solutions 363 HIV-1 713 Homoassociation 753 Host-guest complex 681 HPLC 707 Human immunodeficiency virus 1017 Human serum albumin complex 753 Hydrazine 1113 Hydrogen bonding 695 Hydrogenation reaction 225 Hydrolysis 1121 Hydroquinones 945 Hydrothermal synthesis 535 o-Hydroxyacetophenone isobutyroylhydrazone 811 2-Hydroxy-benzoyl compounds 695 Hydroxylactams 301 Hydroxyl ammonium fluoride 1207 5-Hydroxy-3-methyl-1-phenyl-4-pyrazolyl methane 859 Hydroxynaphthalenic Schiff bases 275 2-Hydroxy-thiobenzoyl compounds 695 Hypericin 313, 753 Hypochromism 451

(6H)-10,14-Iminoethano-phenanthren-6-one 345 (5H)-10,13-Iminoethano-phenanthro [4,5-bcd]furan 345, 355 In(III) electroreduction 363 Inclusion complex 681 p-Indazolquinones 945 π-π Interaction, aromatic 983 Intercalation 153 Interconversion barrier 955 Intramolecular alkylation 1273 Intramolecular cyclization 1397 Inverse folding 167 3-Iodo-4,6,8-trimethoxy-2(1H)-quinolinone 225

Ionization of quinoline derivatives 869

IR 695, 1075, 1389 IR spectrophotometry 15 Iron 491 Iron complexes 1171 Isocamphane derivatives 335, 921 exo-Isocamphanylcyclohexanol 747 Isocamphodiene 921 Isomer enumeration 403, 887 Isomerization 933 (Z)/(E)-Isomerization 1443 Isopiestic method 1067 Isopropyl tartrate 485 Isosolvation point 655 Isostentorin 955 Isosteric compounds 1159 Isotropic compounds 671 Δ<sup>2</sup>-Isoxazoline-carboxylates 469

Kekule 539 Ketal 335 Ketal-enolether equilibrium 425 β-Keto acid anilides 441 β-Ketoesters 247

β-Lactams 1247

LAH/AlCl<sub>3</sub> 933

Lanthanide 285

Lanthanoid(III) complexes 647

Lanthanons 247

Lanthanum ammonium nitrate 1027

Laser efficiency 43

Lead tetraacetate cleavage 763

LiFe<sup>III</sup>(SeO<sub>3</sub>)<sub>2</sub> 535

Liquid mixtures 877

Luminescence 647, 1339, 1353

Magnetic measurements 385
Manganese complexes 515
Mean amplitudes of vibration 47
Mechanism 217
Medium effects 869
Metal complexes 395
6,12-Methano-dibenz[d,g][1,3]oxazocinone 95
4,4-Methylene-1-methylpiperidine 553

4,4-Methylene-1-methylpiperidine 553 8-Methylisoquino[2,1-b]naphthyridinium chlorides 1397 Methyloctahydro-anthracen-9-ones 933 2-Methylsorbic acid 707 Michael addition 441 Michael reaction 217 Mitsunobu reaction 79 Mixed metal complexes 267 Mixtures of non-electrolytes 241 Mo(CO)<sub>6</sub> induced deoxygenation of oxiranes 85 Mo-doted Y-zeolites 485 Molecular mechanics computation Molecular modeling 681 Molecular shape 747 Molecular structure 1427 Molecular surface comparison 747 Monensin Complexes 801 Monoheptapolyhex 403, 1327 Monophenylation 1293 Morphine alkaloids 1229 MS 571 Multi-solute adsorption 1 Multi-step electrode process 363 Multiple linear regression 1259 Multivariate analysis 1259

[NH<sub>3</sub>OH]F 1207 NH<sub>4</sub>Ag<sub>2</sub>(AsS<sub>2</sub>)<sub>3</sub> 1311 (NH<sub>4</sub>)<sub>5</sub>Ag<sub>16</sub>(AsS<sub>4</sub>)<sub>7</sub> 1311 N-Acetyl-10-dicyanomethylene-9-anthrone hydrazone 1121 N-Acylated imines 259 N-Allyltrichloroacetamide derivatives 485 N-Amination 35 N-Aryl-1,2,3,4-tetrahydro-3,3-dimethyl-2,4-quinolinediones 457 N-Aryl-1,2,3,4-tetrahydro-3,3-dimethyl-2,4-quinoline-dithiones 457 N-Aryl-1,2,3,4-tetrahydro-3,3-dimethyl-quinoline-2-one-4-thiones 457 N-Butyl-N'-phenylsulfonyl thiourea 1339 N-Cyclohexyl-2-pyrrolidone 293

N-(3,5-Dichlorophenyl)-itaconimide

301

N-Monosubstituted N'-sulfonylthioureas 1353

N-Substituted dihydronorthevinone 1229

N,N'-Azo-3-azabicyclo[3.3.0]octane 1113

N,N-Dialkylmonothiocarbamates 1353

N,N-Dialkyl-N'-phenylthioureas 1353

N,N-Dimethylformamide 655

N,N-Dimethylthreonine, complexes with Cu(II) 1083

Naphtho[1,2-d][1,3]thiazines 433

Neodym magnesium nitrate 691

Nisoldipine 509

Nitrile oxide 553, 735

Nitrone 553

NMR 607, 695, 735, 1101, 1113, 1267, 1287

11B NMR 607

13C NMR 571, 1407

<sup>1</sup>H NMR 325, 723

<sup>1</sup>H, <sup>13</sup>C, CP/MAS NMR 1443

31P NMR 607

<sup>29</sup>Si NMR 615

119Sn NMR 607

Non-linear optical properties 549

Norborn-5-ene derivatives 335, 921

C-Normorphinans 791

C-Normorphinenes 791 Nucleophilic substitution 927

Nucleoside synthesis 593, 713

O-Demethylation with *DIBAL* 1229 Odour 921

Olefinic esters 743

Olfactoric Theories 1159

Optical activity 671

1,2-Oxazoles 571

1,2-Oxazolines 735

Oxidation 1121

Oxidation 731

7R-Oxiranes of 5Z- and 5E-10-oxo-19norcholecalciferol 85

7*R*-Oxiranes of the ethylisoxazoline adducts of 5*Z*- and 4*E*-cholecalciferol 85

Oxybutynine 1183

Oxygen radicals 623 Ozonolysis 335

Parallel computing 167

Patchouli-like odour 335

Penicillium vermiculatum 707

Perfumes 1159

Perhydronaphtho[1,8-bc]furan 773

Pesticide 977

Pharmaceutical activity 1437

Phase diagrams 1371

Phenylene 539, 887

1-(2-Phenylsulfonylmethyl-phenyl)-2azetidinones 71

Photochemical Hydrogen Abstraction 773

Photochemistry 1241

Photocycloaddition 1153

Picolinic acid 15, 833

Piperidine 877

Pitzer model 1371

Polarography 373, 497, 509, 1183

Polybasic acids 1059

Polycarbosilane 895

Polycyclic conjugated hydrocarbon 403

Polycyclic hydrocarbon 1327

Polymers 25

Polymethine dyes 61

Polyoxometalate 525

Potentiometry 15, 233, 373, 841, 849, 859, 1049, 1059, 1197

Praseodymium ammonium nitrate 1027

Prebiotic peptide formation 1033

Pre-ceramic polymer 895

Prediction of multicomponent adsorption 1

Preparation and Photoreaction of an endione 773

Principal components analysis 1259

8-(1-Propenyl)-theophylline 565

Protease 468

Public domain software 167

3,5-Pyrazole derivatives 1437

Pyridine 877

Pyridine carboxylic acid 1197

Pyridinologous linear tri- and tetrapyrroles 325 Pyrimidine-5-thioles 1129 Pyrylium salts 61

Quantitative softness values 267 Quinazolinone 743 Quinolines 1407 Quinolizidine alkaloids 1267

Radicalic isomerization 791 Rapid synthesis 901 Rare earth magnesium nitrates 415 RbFe(SeO<sub>4</sub>)<sub>2</sub> 1223 Rearrangement of the terminal C=C bond 565 Redox systems 15, 107 Reduction 933 Reductive cleavage of isoxazolines Regio- and stereoselective NaBH<sub>4</sub> reductions 301 Regio- and stereoselectivity of 1,3-dipolar cycloaddition 1413 Reissert compounds 1397 Reversal of toxicity by cysteine and N-acetylcysteine 51 RNA folding 167 RNA secondary structures 167 Rotating ring-disc electrode 363 Sandalwood odour 747 Schiff base 313, 647, 1247

Sandalwood odour 747
Schiff base 313, 647, 1247
Schiff base copper(II) complexes 275
Selenophene 1153
Semiempirical calculations 1121
Separation of cerite earths 415
Sila perfumes 1159
Silazanes 615, 1159
Silicone carbide 895
Silver clusters 1339, 1353
Silver complexes 15, 107
Smectite 153
Sodium thioantimonate nonahydrate 671
Solubility 1215, 1371
Solubility enhancement 681

Solubility isotherm 599 Solvation 515, 655 Solvation in hexane-CDCl3 mixture 293 Solvatochromic shift 549 Solvatochromism 827, 1189 Solvent and catalyst effect 901 Solvent effect 661, 753, 801 Solvent mixtures 233 Sonification 921 Sonochemistry 1407 Speciation 247, 1083 Spectral behaviour 43, 1321 Spectrophotometry 1197 Spectroscopic studies 945 Spin cross-over 661, 1301 Spiroheterocycles 909 Spiropiperidines 909 Spontaneous resolution 119, 141 Stability 267 Stability constants 841, 1083 Stacking 753 Stentor 313 Stentorin 955 Stereochemistry 217 Stereoselective synthesis 773, 991 Steric effects 51 Steric hindrance 35 trans-Stilbene 259 Structure 259 Structure count 539 Structure elucidation 945 Structure-activity relationship, quantitative 1259 Structure-odour relationship 1091 4-Substituted 2,6-bis-(benzimidazol-2'-yl)-pyridine complexes 661 Substituted benzoylketene-S,S-acetals

1389
2-Substituted 2,3-dihydrofuro[2,3-b] quinoline derivatives 225
Substituted dioxine 1427
Surface charge 153
Surface functional groups 1365
Surface tension 241
Suspension measurements 671
Symmetry of redox orbital 491

Synergism between isomers 51 Synthesis 1113, 1311, 1437

Tautomerism 955 Ternary complexes 849 TES 233 Tetraaza macrocycles 385 Tetraazamacrocyclic amines 107 Tetraazamacrocyclic ligands 515 11,11,12,12-Tetracyano-anthraquinodimethane 549 Tetradentate Schiff base ligands 491 1,2,3,5-Tetrahydro-benzo[b]azepin-4one 71 1,2,3,4-Tetrahydroquinoline-3,4epoxides 963 Tetraoxaspiranes 451 Tetrasilane 615 1H-Tetrazole-5-thiol 977 Thallium complexes 1339 Theophylline 79 Thermal decomposition 1075 Thermal dissociation 599 Thermochromism 661 Thermodynamic excess functions 241 Thermodynamic parameters 811 Thermodynamics 373, 841, 877 [1,3,5]- and [1,3,6]-Thiadiazepino-[3,2fl-purines 1273 1,3,4-Thiadiazoles 587 4-Thiazolidine carboxylic acids 189 Thiazolidine-2.4-diones 1129 Thiazoline-2-ones 1129 Thiazoline-2-thiones 1129 Thiazolo[4,5-e]isothiazoles 1129 Thiazolo[4,5-d]pyrimidines 1129 Thieno[2,3-b][1,4]oxazines 927 Thioarsenates(III) and (V) 1311 2-Thiohydantoins 593 Thiosemicarbazone 823 Thorium complexes 859 Thulium complexes 1075 Thymidine, 3'-deoxy-3'-mercapto 1017

Torsional chirality 783

Toxicomechanism 623 Transition metal complexes 1301 Tree editing 167 3.3'-bi-Triazines 119 Triazoles 395 Triflumizole 681 4,4-bis-(Trifluoromethyl)-1-oxa-3azabuta-1,3-dienes 1279 2,3,4-Trihydrodibenzofuran-3-ones (5H)-3.6.8-Trimethoxy-(8H)-14.13iminoethano-phenanthro[4,5-bcd] furan 355 Trimethyl-dioxa-tricyclo[4.2.2.0]decane 335 2,2,5-Trimethyl-1,3-dioxolane-4-carbaldehydes 763 Triphenylbismuth diacetate 1293 Tripodal ligands 647 Trisdiimine complexes 119, 141, 153 Trisilane 615

Ultrasound chemistry 921 Unsaturated alcohols 79 UV/Vis 259, 647, 1083

Trithiocarbodiglycolic acid 373

Van der Waals surface 747 Vanadium in vivo - toxicity 623 Vermiculin 707 Vibrational spectroscopy 833 Vitamin D 85 Voltammetry 497

Water 107 Water-organic solvents 1049

X-ray analysis 95, 735, 963 X-ray crystal structure 783

Yttrium earths, separation of cerium earths from 479

Zinc cobalt selenate 1067

